

WHAT IS CLAIMED IS:

1 1. A method of transcoding image data in a compressed
2 format comprising the steps of:
3 decoding differential pulse code modulation DC frequency
4 components of plural image blocks;
5 partitioning the image into a plurality of image cells,
6 each image cell including a plurality of image blocks;
7 recoding DC frequency components of plural image blocks
8 in differential pulse code modulated format, said differential
9 pulse code modulated of said image blocks contained solely
10 within a corresponding image cell;
11 extracting the Huffman tables from the image data;
12 storing said extracted Huffman tables together with an
13 indication of an associated image cell in a header for said
14 image cell;
15 identifying image blocks by a block count; and
16 recoding said identified image blocks into corresponding
17 image cells.

1 2. The method of transcoding of claim 1, wherein:
2 said step of extracting Huffman tables includes
3 detecting any new Huffman tables within said image
4 block, and
5 storing said detected Huffman table with a define
6 Huffman table marker in said corresponding image cell.

1 3. The method of transcoding of claim 1, wherein:
2 said step of identifying image blocks by a block count
3 includes

4 detecting end of block identifiers in said image
5 data, and
6 assigning sequential numbers to identified image
7 blocks.

1 4. The transcoding method of claim 1, further comprising
2 the step of:
3 storing a starting address of each recoded image cell.

1 5. The transcoding method of claim 1, further comprising
2 the steps of:
3 performing an image transformation from a source image in
4 said transcoded format to a destination image including
5 identifying a next source pixel in the image
6 transformation,
7 determining if said next source pixel is in a new
8 image cell,
9 if said next source pixel is not in a new image
10 cell, then performing said image transformation, and
11 if said next source pixel is in a new image cell,
12 then decompressing said new image cell and performing
13 said image transformation,
14 until said image transformation is performed on a last
15 source pixel.

1 6. The transcoding method of claim 1, further comprising
2 the steps of:
3 performing an image transformation from a source image in
4 said transcoded format to a destination image including
5 identifying a next source pixel in the image

6 transformation,
7 determining if said next source pixel is in a new
8 image cell,
9 if said next source pixel is not in a new image
10 cell, then performing said image transformation, and
11 if said next source pixel is in a new image cell,
12 then decompressing said new image cell and performing
13 said image transformation if memory is available to store
14 said decompressed new image cell, else discarding a prior
15 decompressed image cell, then decompressing said new
16 image cell and performing said image transformation, and
17 until said image transformation is performed on a last
18 source pixel.